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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/364,317	07/30/1999	REINER WAMSSER	10191/1145	9279

26646 7590 07/19/2002

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EXAMINER

MASKULINSKI, MICHAEL C

ART UNIT PAPER NUMBER

2184

DATE MAILED: 07/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

OK

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<b>Office Action Summary</b>	<b>Application No.</b> 09/364,317	<b>Applicant(s)</b> WAMSSER ET AL.	
	<b>Examiner</b> Michael C Maskulinski	<b>Art Unit</b> 2184	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 June 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 2, 4-8, and 10-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Poisner, U.S. Patent 6,012,154.

Referring to claim 1:

- a. In column 4, lines 14-26, Poisner discloses a processor, coupled to a host bus, for processing information (controller). In column 2, lines 31-52 and in Figure 2, Poisner discloses an operating system-related software agent running on a processor that is separate from the processor (the stored-program control being external to the safety device). Further, in column 4, lines 36-41, Poisner discloses an expansion bus bridge that couples the host bridge to an expansion

bus (bus system). Devices (peripheral devices) coupled to the expansion bus include a display device, an alphanumeric input device, a BIOS read-only memory, and an information storage device for storing information including an operating system and applications.

b. In column 3, lines 32-40, Poisner discloses an interrupt handler stored in non-operating system memory space (memory with safety-relevant data stored on it).

Referring to claim 2, in column 4 lines 60-67 continued in column 5 lines 1-9, Poisner discloses a timer (monitor) which is periodically reset with the value stored in register (wake-up signal) by the software agent (stored-program control).

Referring to claims 4 and 10, in column 2, lines 31-52, Poisner discloses that if the timer does expire (function of wake-up signal), an interrupt is generated. The generated interrupt causes the processor to execute an interrupt handler. The interrupt handler attempts to investigate and cure any system malfunction that resulted in the timer expiring. One such interrupt it attempts to correct is Peripheral Component Interconnect interrupts. This involves data exchange with the expansion bus (bus system) and its inherent bus controller because the peripherals are connected to the expansion bus.

Referring to claims 5 and 11, in column 4, lines 36-41, Poisner discloses an alphanumeric input (control signal) connected to an expansion bus (interface), which is in turn connected to the host bus. In column 4, lines 14-26, Poisner discloses that the host bus is used for communicating information, such as instructions and data. Further,

attached to the host bus are the processor (controller) and the software agent (stored-program control).

Referring to claim 6, in column 3, lines 32-40, Poisner discloses an interrupt handler (real-time controller) that is executed by the processor (controller) to investigate and cure malfunctions (see Poisner: column 1, lines 26-33). In order for the interrupt handler to investigate and cure software malfunctions, a data exchange must occur between the processor (controller) and the software agent (stored program control) via a host bus (bus system) (see Poisner, figure 2).

Referring to claims 7, 12, and 14, placing at least the controller, the memory, the monitor, and the interface of the safety device on a circuit board is inherent to a device with components such as memories, controllers, watchdog timers, and buses.

Referring to claim 8:

a. In column 4, lines 14-26, Poisner discloses a computer system (safety device) with a processor, coupled to a host bus, for processing information (controller). In column 2, lines 31-52 and in Figure 2, Poisner discloses an operating system-related software agent running on a processor that is separate from the processor (the stored-program control being external to the safety device). Further, in column 4, lines 36-41, Poisner discloses an expansion bus bridge that couples the host bridge to an expansion bus (bus system). Devices (peripheral devices) coupled to the expansion bus include a display device, an alphanumeric input device, a BIOS read-only memory, and an information

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storage device for storing information including an operating system and applications.

b. In column 4 lines 60-67 continued in column 5 lines 1-9, Poisner discloses a timer (monitor) which is periodically reset with the value stored in register (wake-up signal) by the software agent (stored-program control).

Referring to claim 13:

a. In column 4, lines 14-26, Poisner discloses a computer system (safety device) with a processor, coupled to a host bus, for processing information (controller). In column 2, lines 31-52 and in Figure 2, Poisner discloses an operating system-related software agent running on a processor that is separate from the processor (the stored-program control being external to the safety device). Further, in column 4, lines 36-41, Poisner discloses an expansion bus bridge that couples the host bridge to an expansion bus (bus system). Devices (peripheral devices) coupled to the expansion bus include a display device, an alphanumeric input device, a BIOS read-only memory, and an information storage device for storing information including an operating system and applications.

b. In column 4, lines 36-41, Poisner discloses an alphanumeric input (control signal) connected to an expansion bus (interface), which is in turn connected to the host bus. In column 4, lines 14-26, Poisner discloses that the host bus is used for communicating information, such as instructions and data. Further,

attached to the host bus are the processor (controller) and the software agent (stored-program control).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poisner, U.S. Patent 6,012,154. In column 2, lines 2-9, Poisner discloses generating an interrupt when the timer runs out. This interrupt is handled by the interrupt handler, which is internal to the system. Poisner never explicitly discloses providing an output signal displaying the interrupt. The examiner takes official notice that in the art of error detecting and displaying it is well known in the art to display the error (operability) in the system (stored-program control). It would have been obvious to one of ordinary skill at the time of the invention to include an output signal displaying the interrupt into the system of Poisner. A person of ordinary skill in the art would have been motivated to make the modification because in column 4, lines 1-13, Poisner discloses that the steps of loading the timer, periodically resetting the timer during the boot process and while attempting to cure the malfunction, and performing a more complete system reset can be repeated any number of times. Each time the timer expires, more severe actions

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can be performed in order to attempt to cure the malfunction. The most severe action might include powering down and then powering up the system. This last action usually requires user interaction with the system, therefore there must be an output signal displaying the interrupt to the user.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1, 8 and 13 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C Maskulinski whose telephone number is (703)



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308-6674. The examiner can normally be reached on Mon-Thu 7:30-5 and Fri. 7:30-4 (second Fri.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoleil can be reached on (703) 305-9713. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3718 for regular communications and (703) 305-3718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

MM  
July 17, 2002

  
ROBERT BEAUSOLEIL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100